# APRIL 17, 1989 NARRATIVE FOR CORSON COUNTY, SOUTH DAKOTA OIL AND GAS DEVELOPMENT POTENTIAL MAP

# **INTRODUCTION:**

Corson County is located in the north-central part of the state. Its northern county line forms the state line between North and South Dakota. The entire county is within the Standing Rock Indian Reservation, therefore the lands were not classified. However, a portion of the Grand River-Cedar River National Grasslands is situated within the Indian Reservation in Ts. 18 & 19 N., Rs. 17 & 18 E. Of the approximately 83 square miles within the Corson County portion of the Grasslands, 70 square miles contain Forest Service surface administered acreage.

The Custer National Forest is planning to prepare a Resource Management Plan for these grasslands, including these in Corson County. At this print it is believed that a reasonable foreseeable development for the grasslands within Corson County will be similar to Perkins County to the west.

## OCCURRENCE POTENTIAL

The National Grasslands portion of Corson County is classified as "HIGH" oil and gas occurrence potential. It is in the southern portion of the Williston Basin and has more than 5,000 feet of sedimentary rocks. The type log for this area is the shell 11-23 Govt., NW NW , sec. 23 T. 19 N., R. 18 E., which was in the Mississippi Lodgepole at 5,777, total depth. It has similar rocks to other parts of the Williston Basin which are oil and gas productive.

### DISCUSSION OF DEVELOPMENT POTENTIAL RATING

This portion of Corson County is classified as "MODERATE" development potential because it is similar to Perkins County to the west. Also there have been eleven wells to the north and east which have had oil and/or gas shows. Wildcatting and possible development may occur in the next 15 years. This will probably involve one or more exploratory wills. A discovery would assure additional drilling in the area.

# **REFERENCES SITED**

Mallory, W.W. (ed.) 1972, Geologic Atlas of the Rocky Mountain Region: Rocky Mountain Association of Geologists, p. 56. Searight, W.V. 1034, The Geology of Central Perkins County, South Dakota: South Dakota State Geological Survey Request of Investigations No. 21, 52 p.